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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/071,021	05/01/1998	RICHARD FRANK BRUNO	20-21-26-22-	5065

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EXAMINER

TSEGAYE, SABA

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/071,021

Applicant(s)

BRUNO ET AL.

Examiner

Saba Tsegaye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-15 and 17-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-15 and 17-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

1. This Office Action is in response to amendment filed 10/30/06. claims 1-5, 7-15 and 17-27 are pending. Currently no claims are in condition for allowance.

***Claim Rejections - 35 USC § 103***

2. Claims 1, 2, 4, 5, 7-12, 14, 15 and 17-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh et al. (US 6,614,783) in view of The Admitted Prior Art (fig. 1).

With regard to claims 1, 11, 14, 21, and 22, Sonesh discloses a method and system for connecting a call to one of a plurality of agents (120) in a call center (ACD 110), wherein the method comprises receiving a query from a plurality of telecommunications networks (figs. 1 and 2; 111, 112), regarding whether at least one agent is available, among the plurality of agents (120; column 2, lines 45-53), each telecommunications network being a disparate telecommunications network with respect to other telecommunications networks of the plurality of telecommunications networks the agent (120, 121 (within each telecommunications network)) being coupled within each disparate telecommunications network (113, 112; column 7, lines 1-20; see figs, 1 and 2); determining which available agent is to be connected based on the availability of the agent as well as a most idle agent criteria (column 5, lines 49-51; column 7, lines 17-51); responding to query with a connection information of a determined agent; and connecting the call to the determined agent (column 5, lines 51-55). However, Sonesh does not expressly disclose that the determined agent within the one telecommunications network the one telecommunications network being a circuit-switched network.

The Admitted Prior Art (fig. 1, page 2) discloses a plurality of disparate telecommunications networks that are connected to agent 5 (a plurality agents can be located at a call processing center 6). The agent 5 can receive calls or sessions from ATM 7, from an IP 11 and from a circuit switched telecommunications network 13.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a system that determined agent within a circuit-switched network, such as that suggested by The Admitted Prior Art, to the system of Sonesh in order to allow greater flexibility to use any type of system in which an agent or other representative is able to communicate with a customer or other individual or system.

With regard to claims 2 and 12, Sonesh discloses that an availability entry is updated for the agent to indicate that the agent is unavailable when the call is connected to the agent, and to indicate that the agent is available when the call terminates, the availability entry being updated with respect to each of disparate telecommunications networks (111, 112) (column 11, lines 6-10).

With regard to claim 4, Sonesh discloses that the step of determining an availability includes determining the availability of each agent and selecting an agent, wherein the step of responding to the query includes determining routing instructions for routing the call from the telecommunications network through which the query was received to the selected agent (column 5, lines 48-55; column 7, lines 25-29).

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Regarding claims 7 and 17, Sonesh discloses the method wherein at least one of the disparate telecommunications network is an NCP architecture network (see fig. 1).

Regarding claims 8 and 18, Sonesh discloses the method wherein the NCP architecture network is a circuit-switched telecommunications network (111, see fig. 1).

With regard to claims 9, 10, 19 and 20, Sonesh discloses the method wherein the NCP architecture network is an ATM network (column 5, lines 19-37).

With regard to claims 23-26, Sonesh disclose the method wherein the connection information is a routing telephone number (column 7, lines 63-65).

With regard claim 5 and 15, Sonesh discloses that routing algorithms, such as which caller will be routed to which agent or agents groups based on the *caller identify, agent skills, call priority, service and/or area interest and other relevant criteria*, are stored in and decided by the MMACD server. Alternatively the MMACD server may query external databases for *routing information*. If an agent is not available, the call is placed in and appropriate wait queue (the caller is notified of the current average queue wait time), based on caller priority, type of service and/or area selected, or access priority. Sonesh does not expressly disclose that the routing is based on one of a lowest cost criterion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Sonesh in view of The Admitted Prior Art so that the routing is based on a lowest cost criterion that has been common practice in the art as a means

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for selecting the most cost effective route for communication. Doing so would increase flexibility and provide more efficient communication system.

Regarding claim 27, Sonesh discloses a system comprising:

I) a first telecommunications network (113);  
II) a second telecommunications network disparate from the first telecommunications  
(112)

III) a plurality of agent (121, 120), each agent being connected to receive calls transmitted only through network elements of the first telecommunications network (agent 120 receives call from telephone 104, 102 and 101), and each agent being connected to receive calls transmitted only through network elements of the second telecommunications network (agent 121 receives call from users 105);

IV) an agent availability network control point (ACD) connected to the first and second telecommunications networks (113, 112, 111) and each of the plurality of agents (121, 120), the AA NCP including:

(a) an input/output module connected to the first and second telecommunications networks, and connected to the plurality of agents (it inherent to use input/output module to connect the first and the second networks as shown in fig. 1);

(b) an agent update module for determining an availability of each of the plurality of agents based on an availability status in the first telecommunication network and on an availability status in the second telecommunication network (column 5, lines 38-55);

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(c) an agent inventory module containing information about agents including at least an agent skill level criterion and a most idle agent criterion (column 5, lines 38-55);

(d) a routing options module containing information relating to routing strategies within the first and second networks (column 5, lines 38-55; column 7, lines 17-51); and

(e) a statistical program module for analyzing the routing strategies (column 5, lines 48-55);

the AA NCP further being configured to receive a query from a requesting network of the first and second networks through the input/output module, the query regarding whether at least one agent, among the plurality of agents, is available to connect to a user in the requesting network; to select an agent based on information from the agent update module and the agent inventory module; to determine routing instructions using the routing options module and the statistical program module, and to transmit the routing instructions to the requesting network to complete a call within the requesting network from the user to the selected agent (column 5, lines 38-55; column 7, lines 17-51).

Sonesh does not disclose **a plurality of agents in a call center**.

The Admitted Prior Art (fig. 1, page 2) discloses a plurality of disparate telecommunications networks that are connected to **agent 5 located at a call processing center 6** (a plurality agents can be located at a call processing center 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings from The Admitted Prior art of locating a plurality agents at ACD

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disclosed by Sonesh. One of ordinary skill in the art would have been motivated to do this because locating a plurality agent at ACD allows an agent to establish connections with a plurality of disparate telecommunications networks, as shown in fig. 1 of the Admitted Prior Art, and such arrangement would allow caller to access the same agents from multiple network types.

3. Claims 3 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Sonesh et al. in view of The Admitted Prior Art as applied to claims 1 and 11 above, and further in view of Petrunka (US 5,987,116).

Sonesh in view of The Admitted Prior Art discloses all the claim limitations as stated above, except for query uses SS7 singling for communicating with the telecommunications network from which the query was received. However, as known in the art, all phone systems need some form of signaling mechanism to set up and tear down calls. SS7 signaling is carried as out-band signaling which uses a separate data network.

Petrunka teaches that HLS 1110 includes a call identifier with a voice call sent through the PSTN using a standard CCS7 trunk to the local ACD switch (column 5, lines 56-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made modify the invention of Sonesh in view of The Admitted Prior Art so that SS7 signaling is used, as thought by Petrunka, because SS7 signaling has been an effective, well-known method for allowing signaling to take place along a separate network from the information transfer, which would allow communication to proceed without interference between information and signaling.



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***Response to Arguments***

4. Applicant's arguments with respect to claims 1-5, 7-15 and 17-27 have been considered but are moot in view of the new ground(s) of rejection.

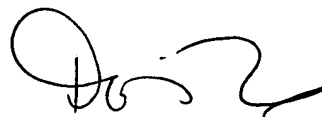
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (571) 272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ST  
November 8, 2006



**DORIS H. TO  
SUPERVISORY PATENT EXAMINER  
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